

ZOOLOGY.—*The ticks (Acarina: Ixodoidea) of the J. Klapperich Afghanistan Expedition, 1952 and 1953.* GEORGE ANASTOS, University of Maryland.

This report brings together the available information on the ticks of Afghanistan and extends to 14 the number of known species from this country. None of the ticks recorded from Afghanistan are endemic but also occur in Iran, in India, and in the southern part of the U.S.S.R. The records and collections studied so far are too small and often lacking in essential data to allow any far-reaching conclusions to be drawn. Undoubtedly future collections will extend the current list considerably since scarcely any tick records are available for the extensive wild fauna known from this country.

The earlier records of ticks in Afghanistan were included only as incidental ones in studies on the tick fauna of the surrounding countries. Yakimov (1922) reported on the Ixodidae in Russia and included one record of *Hyalomma aegyptium* (Linné), 1758, from Koscha on the Russo-Afghan frontier. In a revision of the Indian Ixodidae Sharif (1928) recorded males of *Hyalomma aegyptium dromedarii* Koch, 1844 (probably *H. dromedarii* Koch, 1844), on *Erinaceus megalotis* Blyth from Afghanistan and males of *Hyalomma syriacum* Koch, 1844 (= *H. aegyptium* (Linné), 1758), from Jugdulluk on *Testudo horsfieldi* Gray. An undetermined species of *Ornithodoros* was noted by Avanesov (1938) in native dwellings in North Afghanistan and Pavlovsky (1944) later reported the occurrence of *Ornithodoros papillipes* Irula, 1895 (= *O. tholozani* (Laboulbène and Mégnin, 1882). Pomerantzev (1946, 1950) recognized the occurrence of *H. dromedarii* and of *H. aegyptium* in Afghanistan but was apparently citing the records of Sharif.

In 1954 the author reported the results of a collection from Afghanistan made by the Third Danish Expedition to Central Asia. In addition to *Hyalomma aegyptium* which had been recorded previously the following species were found to be new to Afghanistan:

Hyalomma excavatum Koch, 1844, *H. schulzei* Olenev, 1931, *H. rufipes glabrum* Delpy, 1949, *Dermacentor niveus* Neumann, 1897, *Ixodes redikorzevi emberizae* Pomerantzev, 1950, *Rhipicephalus sanguineus* (Latreille), 1806, and *Haemaphysalis numidiana* Neumann, 1897 (= *H. erinacei* Pavesi, 1884).

In 1955 the author was fortunate to receive another collection from Afghanistan made by J. Klapperich, Bonn, Germany, in 1952 and 1953. This collection, though small, contained four species new to Afghanistan: *Argas persicus* (Oken), 1818, *Dermacentor marginatus* (Sulzer), 1776, *Haemaphysalis sulcata* (Can. and Fanz.), 1877/1878, and *Ixodes redikorzevi redikorzevi* Olenev, 1927. It also expanded the range of four species previously recorded from this area: *Dermacentor niveus* Neumann, 1897, *Hyalomma dromedarii* Koch, 1844, *H. excavatum* Koch, 1844 and *Rhipicephalus sanguineus* (Latreille), 1806. No host information was given for the ticks in this collection.

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COLLECTION DATA

Acc. No.	Species	Locality	Date	No.
EP-6	<i>Argas persicus</i>	Kandahar	18-II-53	1 adult
DM-2	<i>Dermacentor marginatus</i>	Do-Shak, Khinjan Valley, Hindu Kush	1-X-52	1 female
DM-3	<i>Dermacentor marginatus</i>	Larki, Sarekanda Valley, Badakshan	3-VIII-53	1 male
DM-4	<i>Dermacentor marginatus</i>	Walang, Salang Valley, Hindu Kush	29-IX-52	1 female
DM-5	<i>Dermacentor marginatus</i>	Walang, Salang Valley, Hindu Kush	29-IX-52	1 male
DM-6	<i>Dermacentor marginatus</i>	Sarekanda Mountain, Badakshan	31-VII-53	3 females
DM-7	<i>Dermacentor marginatus</i>	Sarekanda Mountain, Badakshan	28-VII-53	1 male, 1 female
DM-8	<i>Dermacentor marginatus</i>	Sarekanda Mountain, Badakshan	29-VII-53	1 female
DN-2	<i>Dermacentor niveus</i>	Sanglish Pass, Minjan Mountain, Badakshan	2-VIII-52	1 female
HSU-2	<i>Haemaphysalis sulcata</i>	Bashgul Valley, Nuristan	9-IV-53	1 female
HSU-3	<i>Haemaphysalis sulcata</i>	Bashgul Valley, Nuristan	8-IV-53	1 male
HSU-4	<i>Haemaphysalis sulcata</i>	Bashgul Valley, Nuristan	24-IV-53	1 male
HSU-5	<i>Haemaphysalis sulcata</i>	Pagman Mountain, 30 km. northwest of Kabul	14-VI-53	1 female
JD-1	<i>Hyalomma dromedarii</i>	Bashgul Valley, Nuristan	11-IV-53	1 female
JD-2	<i>Hyalomma dromedarii</i>	Kandahar-Kuna	22-I-53	2 females
JD-3	<i>Hyalomma dromedarii</i>	Kandahar-Kuna	28-I-53	1 female
JD-4	<i>Hyalomma dromedarii</i>	Kandahar	13-II-53	1 female
JD-5	<i>Hyalomma dromedarii</i>	Vicinity of Kabul	20-III-53	1 female
JE-3	<i>Hyalomma excavatum</i>	Kutiau, Nuristan	5-V-53	1 male
JE-4	<i>Hyalomma excavatum</i>	Vicinity of Kabul	16-V-52	1 male
JE-5	<i>Hyalomma excavatum</i>	Bashgul Valley, Nuristan	8-IV-53	1 male
JE-6	<i>Hyalomma excavatum</i>	Bashgul Valley, Nuristan	24-IV-53	1 male
JE-7	<i>Hyalomma excavatum</i>	Bashgul Valley, Nuristan	17-IV-53	1 male
IRR-1	<i>Ixodes redikorzevi redikorzevi</i>	Pagman Mountain	6-VII-52	1 female
RS-22	<i>Rhipicephalus sanguineus</i>	Bashgul Valley, Nuristan	12-V-53	1 male, 2 females
RS-23	<i>Rhipicephalus sanguineus</i>	Bashgul Valley, Nuristan	6-IV-53	1 male
RS-24	<i>Rhipicephalus sanguineus</i>	Jalabad, Nuristan	30-III-53	3 females
RS-25	<i>Rhipicephalus sanguineus</i>	Kandahar	22-II-53	1 female
RS-26	<i>Rhipicephalus sanguineus</i>	Kandahar	11-II-53	2 males, 3 females
RS-27	<i>Rhipicephalus sanguineus</i>	Kandahar	19-II-53	1 male
RS-28	<i>Rhipicephalus sanguineus</i>	Kandahar	19-II-53	3 males, 6 females
RS-29	<i>Rhipicephalus sanguineus</i>	Kandahar	13-II-53	1 female
RS-30	<i>Rhipicephalus sanguineus</i>	Kandahar-Kuna	22-I-53	1 male
RS-31	<i>Rhipicephalus sanguineus</i>	Kandahar-Kuna	1-III-53	1 female
RS-32	<i>Rhipicephalus sanguineus</i>	Vicinity of Kabul	16-V-52	1 female
RS-33	<i>Rhipicephalus sanguineus</i>	Vicinity of Kabul	16-VI-52	1 male
RS-34	<i>Rhipicephalus sanguineus</i>	Kutiau	5-V-53	1 male, 1 female
RS-35	<i>Rhipicephalus sanguineus</i>	Tchakaran, Wardush Valley	6-VII-53	1 female